SECTION 600 INCIDENTAL CONSTRUCTION

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SECTION 606. CONCRETE GUTTER, CURB, MEDIAN AND PAVED DITCH

606.01 Description

The construction of any concrete curb, concrete gutter, combination concrete curb and gutter, concrete median, or paved ditch, is governed by Section 606 of the Standard Specifications. These items are highly visible to the traveling public, therefore, smooth lines and appearances are important.

606.04 Forms

Article 1103.05 covers the size and type of forms required. Forms shall be made of 2 in (50 mm) surfaced plank or metal. All forms are to be checked prior to placing concrete. Joints should be carefully checked for tightness and any difference in elevation on the top of the forms. Variations in alignment on tangents and flat spots in horizontal curves and between control stakes can be detected by sighting down the form line. Sighting down the top of the back form line will locate variations in elevation between control points if observed from a distance.

SECTION 609. BRIDGE APPROACH PAVEMENT AND SHOULDER PAVEMENT DRAINS

609.03 Inlet Boxes

The inlet box and pipe drain should be positioned between the proposed approach guardrail posts. It may be necessary to increase the length of the approach shoulder pavement or adjust the minimum distance from the end of the approach pavement to the center of the drain. Check the plans and the appropriate highway standard before positioning the inlet box.

SECTION 611. TREATMENT OF EXISTING FIELD TILE SYSTEMS

611.01 Description

This work consists of maintaining the integrity of all existing field tile drainage systems within the limits of the right-of-way. Special care shall be taken in order to minimize possible future disputes with adjacent property owners.

611.02 Locating Existing Field Tile

It is important to locate all field tiles within the right-of-way. As a guideline, a continuous exploratory trench can be excavated along one side of the roadway close to the right-of-way. Intermittent trenching can be done along the opposite R.O.W. where it is anticipated to intersect with the file found in the initial trench. An accurate field book should be kept of locations and flowline elevations of all field tiles found during exploration trenching. This information can be plotted on as-built plan sheets for future reference during and after construction of the project.

611.03 Existing Field Tile Intercepted by Backslopes

Outletting field tile into the ditch is the economically preferred method of treatment. In some instances, however, this can cause continual wetness of the ditch which promotes unattractive weeds and can make maintenance mowing difficult. It can also drain along the ditch and then outlet onto adjacent private property, often the same property that the field tile is draining. This, in effect, takes subsurface water and makes it surface water again. This can cause disputes with the affected adjacent property owners. The Engineer should consider if there is a cost effective alternative to draining the field tiles into the ditch. Some options to consider are adjusting the ditch so as not to intercept the tile, reroute the tile along the R.O.W. to another tile which is not intercepted by the ditch grade, or reroute the tile to outlet into a stream which has a continual flow of water.

611.04 Field Tile Not Intercepted by Backslopes

If there is enough cover between the top of the field tile and the ditch grade, typically 600 mm (2 ft) or greater, then the concrete slab protection is not required.

611.05 Field Tile Junction Vaults

In addition to junction vaults, inspection wells (or risers) should be installed for future use to verify the operation of the field tile system. Inspection wells should be placed approximately 600 mm (2 ft) inside the R.O.W. lines at all locations where field tile enters or leaves the right-of-way. Risers would not be necessary at locations where the field tile is intercepted by the backslopes of ditches as water flow from the terminating headwalls would provide sufficient inspection.

Components used for inspection wells can typically be a T-section, a portion of pipe rising at least 300 mm (1 ft) above the ground line, and a suitable lid or cap. Materials can usually be the same as those used for the STORM SEWER (SPECIAL), except that the material rising above ground must be UV resistant.

SECTION 664. CHAIN LINK FENCE

664.03 General

The purpose of chain link fence is to control access onto State right-of-way in an aesthetically pleasing way. This result can only be accomplished by correct horizontal and vertical alignment.

The bottom of the fence should clear natural ground by a minimum of 25 mm (1 in) and maximum of 125 mm (5 in) with 75 mm (3 in) clearance being desirable. Any high points or other obstacles which interfere with the above clearances should be removed. At locations of small natural drainage ditches where it is not practical to conform the fence to the general contour of the ground surface, the resulting opening below the fence should be closed with barbed wire fastened to stakes of such length as required.

664.04 Installing Posts

To provide for true alignment and the centering of the post in the footing, a stringline or other suitable method of alignment should be used by the Contractor in excavating for the post footings. After the concrete is placed, alignment of posts should be checked by stringline or

"eyeball" while the Class SI footing concrete is still in a plastic state. All posts should be plumbed with a suitable carpenter's level and concrete footings trowel finished and sloped away from the post to protect the posts from later corrosion. When digging footing holes, care should be exercised not to disturb existing right-of-way posts. Although various soils behave differently, 300 mm (1 ft) clearance from the right-of-way post is generally sufficient. No fabric should be stretched or tied until the footing concrete is at least seven days old.

664.07 Braces

For each brace there must be a truss rod in the same span to transmit fabric from the brace post back to the terminal post. Braces and truss rods should be securely fastened to the posts prior to fabric erection.

664.08 Fabric

Fabric should be erected on the outside of the fence line with the top of the fence extending 25 mm (1 in) above the top tension wire. In no case should the erected fabric be in contact with the ground. No continuous run of fabric should be installed in excess of 200 m (660 ft) because of expansion considerations. Every run of fabric must terminate at a terminal (end, corner, gate or pull) post and be properly supported by brace and truss rod if called for on the plans. Protective electrical grounds should be installed as called for on the plans and Article 664.11.

SECTION 665. WOVEN WIRE FENCE

665.03 General

The purpose of Woven Wire Fence is to delineate the access control limits of property adjacent to the right-of-way.

It is desirable to have the fence built before other construction work is started. This is especially important in rolling terrain where areas may become inaccessible after cuts are made.

At locations where it may be impossible to build the fence on State right-of-way, an easement will be needed before any fence can be built on private property.

The bottom strand of the woven wire should clear the ground by 25 mm (1 in) with a maximum of 75 mm (3 in) allowable. Any high points or other obstacles which interfere with the above clearances should be removed. At locations of small natural drainage ditches where it is not practical to conform the fence to the general contour of the ground surface, the resulting opening below the fence should be closed with barbed wire fastened to stakes of such length as required. All concrete post encasements should be crowned and sloped to drain. No continuous run of fabric shall be installed in excess of 200 m (660 ft) because of expansion considerations. If wood posts are used, protective electrical grounds should be installed as called for on the plans and Article 665.03.

Review carefully the areas adjacent to culverts and pipes before setting pullposts to prevent washouts and maintenance.